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ALLEGHENY FOREST EXPERIMENT STATION*

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VOLUME TABLES FOR LOBLOLLY PINE (Pinus taeda L.) 7.153

By G. Luther Schnur, Silviculturist

The following volume tables for loblolly pine were computed by the Allegheny Station primarily for use in analyzing the Eastern Shore permanent sample plot records for a study of growth and development of old field stands. Recent requests for information concerning loblolly pine on the Delmarva Peninsula makes it desirable to present these tables in technical note form. Tree measurements were furnished by the Maryland State Department of Forestry.

LOBLOLLY PINE - MARYLAND
(Pinus taeda L.)

Entire stem - Less bark - Cubic feet

D.B.H.:	Total height - Feet										Basis
o.b.:	10	20	30	40	50	60	70	80	90	100	No. of
Inches:	Volume - Cubic Feet										Trees
2	0.10	0.19	0.28	0.37							4
3	.24	.46	.69	.93							14
4	.43	.85	1.27	1.66	2.03						11
5	.67	1.35	2.00	2.60	3.18						15
6		1.97	2.86	3.75	4.60	5.45	6.40				22
7		2.63	3.88	5.05	6.3	7.5	8.8	10.0	11.1		24
8		3.4	5.0	6.7	8.2	9.8	11.3	12.8	14.3		25
9		4.2	6.3	8.4	10.2	12.1	14.0	16.0	18.0		27
10		5.2	7.8	10.3	12.6	15.1	17.6	19.9	22.2		26
11			9.4	12.2	15.1	18.1	21.0	24.0	26.6	29.5	28
12			11.0	14.6	18.0	21.4	24.8	28.0	31.2	34.8	19
13			12.8	17.1	21.0	25.0	29.0	32.5	36.5	41.0	32
14			14.8	19.8	24.1	28.8	33.3	37.8	42.0	47.0	21
15			17.2	22.6	27.5	33.0	38.0	43.0	48.0	53.5	29
16				25.5	31.0	37.0	43.0	48.5	54.0	61.0	20
17				28.5	35.0	41.5	48.0	54.2	62.0	68.0	19
18				32.0	39.0	47.0	54.0	62.0	69.0	77.0	12
19				35.8	44.0	52.0	61.0	68.0	77.0	86.0	6
20				39.8	48.5	58.0	68.0	76.0	85.0	95.0	5
21					53	65	74	84	94	103	6
22					59	70	81	92	101	112	2
23					64	76	88	98	109	121	2
24					68	82	95	106	119	133	1
25					75	89	102	115	130	144	
Basis	3	14	24	47	52	59	111	57	3	370	

Basis - 370 Trees, measured by Maryland State Dept. of Forestry on Eastern Shore. Aggregate deviation, table 0.03 percent low; average percentage deviation 7.58. Stump 1.0 ft. high, measured as a cylinder, volume measured by planimeter; table read from alinement chart constructed from logarithmic multiple regression equation by G. Luther Schnur in 1932.

*In cooperation with the University of Pennsylvania.

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LOBLOLLY PINE - MARYLAND
(Pinus taeda L.)

Merchantable stem - With bark - Cubic feet
(To a 3-inch top o.b.)

D.B.H.:	Total height - Feet									:Basis
o.b. :	20	30	40	50	60	70	80	90	100	:No.of
Inches:	Volume - Cubic Feet									:Trees
3	0.19	0.19	0.19	0.19						1
4	.45	.62	.77	.94	1.10					11
5	.91	1.37	1.79	2.23	2.69					15
6	1.47	2.27	3.05	3.90	4.70	5.50	6.25			22
7	2.09	3.28	4.51	5.70	6.90	8.00	9.28			24
8	2.77	4.45	6.05	7.65	9.30	10.80	12.50	14.10	15.80	25
9	3.60	5.65	7.70	9.80	11.80	13.85	16.00	18.15	20.25	27
10	4.48	7.00	9.60	12.30	14.90	17.45	20.00	22.75	25.25	26
11		8.5	11.5	14.7	17.8	21.0	23.9	27.0	30.0	28
12		10.0	13.6	17.4	21.0	24.4	28.0	32.0	36.0	19
13		11.4	15.7	20.0	24.0	28.0	32.7	37.0	41.5	32
14		13.1	18.0	22.8	27.5	32.4	37.4	42.5	48.0	21
15		14.7	20.3	25.7	31.0	37.0	43.0	49.0	55.0	29
16			22.5	28.5	35.0	41.5	48.0	55.0	61.0	20
17			25.0	32.0	38.5	46.0	53.5	60.0	67.0	18
18			27.0	35.0	43.0	51.0	59.0	66.0	72.6	13
19			29.5	38.0	47.0	56.0	63.5	71.0	78.0	6
20			32.5	42.4	52.0	60.5	69.0	76.0	84.0	5
21				46.0	57.0	65.0	74.0	82.0	90.0	6
22				50	61	70	79	88	97	2
23				54	65	75	84	93	102	2
24				57	68	78	88	98	110	1
25				61	72	83	93	104	117	
Basis	8	16	47	52	59	111	57	3		353

Basis - 353 Trees, measured by Maryland State Dept. of Forestry on Eastern Shore.
Aggregate deviation, table 0.85 percent low; average percentage deviation 9.10.
Stump 1.0 ft. high, top diameter outside bark 3.0 inches, volume measured by planimeter; table read from alinement chart constructed from logarithmic multiple regression equation by G. Luther Schnur in 1933.

LOBLOLLY PINE - MARYLAND
(*Pinus taeda* L.)

Board feet - International rule - 1/8" kerf
(To a 5-inch top i.b.)

D.B.H.:	Total height - Feet									:Basis
o.b. :	20	30	40	50	60	70	80	90	100	:No.of
Inches:	Volume - Board Feet									:Trees
5	3	3	3	3						18
6	4	4	5	6	7	8	10			23
7	6	9	12	16	20	24	28			31
8	9	14	21	27	35	43	52	61		25
9		21	32	42	55	67	80	93		26
10		28	42	58	74	91	110	128	142	28
11		36	54	73	94	117	140	165	182	21
12		44	67	91	117	146	176	202	225	35
13			80	108	141	175	208	243	268	25
14			93	128	168	204	246	286	320	26
15			108	148	190	235	282	330	370	22
16			122	168	215	265	325	378	420	20
17			137	188	242	300	368	425	470	11
18			153	208	263	338	405	475	530	6
19			169	230	299	375	445	525	578	7
20			183	250	328	405	485	573	635	5
21				270	353	440	530	620	685	1
22				293	380	477	575	670	740	1
23				320	410	510	615	720	790	1
24				338	440	548	660	770	850	
25				365	470	580	705	810	900	
Basis	5	7	38	52	59	111	57	3	332	

Basis - 332 trees, measured by Maryland State Dept. of Forestry on Eastern Shore.

Aggregate deviation, table 0.126 percent low; average percentage deviation 13.2. Stump 1.0 ft. high; top diameter inside bark 5.0 inches; scaled in 16 ft. log lengths with trimming allowance of 0.3 ft. Small trees and additional top sections scaled as fractions of 16-ft. 5-inch logs. Table read from alinement chart constructed from logarithmic multiple regression equation by G. Luther Schnur in 1933.

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